



The Many Facets of Mount Rainier



Wonderland Trail hikers at Martha Falls in Stevens Canyon.

At 14,410 feet high, Mount Rainier is the tallest peak in the Cascade Range and an icon of the Pacific Northwest. While the mountain's well-known profile is visible for many miles in any direction, its alpine, glacier-clad slopes occupy only a third of Mount Rainier National Park. There are as many different facets of the park as there are views of Mount Rainier. Take the time to explore the other two-thirds of the park, and discover what lies within the shadow of the great mountain that local Native Americans call "Tahoma."

Northwest: Carbon River and Mowich Lake

Located on the "quiet side" of the park, the Carbon River valley showcases ancient forests, deep valleys and waterfalls, and a dynamic, flood-prone river that flows from the Carbon Glacier, the lowest-elevation glacier in the continental U.S. Or follow State Route 165 to Mowich Lake, the park's largest and deepest lake. Look for colorful subalpine wildflowers along its shores. From the picnic area at road's end, trails lead to subalpine lakes, flower-strewn meadows, and amazing views of the park's wilderness from the Tolmie Peak fire lookout.

Southwest: Longmire

Deep in the valley of the Nisqually River, the village of Longmire preserves the history of the park's first settlement and headquarters. The Longmire Museum is the starting point for the self-guided walking tour of the Longmire Historic District, where you can get a taste of early National Park Service rustic architecture. Follow the Trail of the Shadows to learn about the park's first homestead and resort, next to Longmire Meadow's mineral springs. Between Longmire and Nisqually Entrance, walk the Twin Firs Trail to view lowland old-growth forest; picnic at Kautz Creek where you can view

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80th Anniversary of the Civilian Conservation Corps

2013 marks the 80th anniversary of the founding of the Civilian Conservation Corps (CCC), a Depression-era program that was designed to put economically disadvantaged young men from across the United States to work on infrastructure projects, including the construction and repair of trails, roads and campgrounds here at Mount Rainier National Park.

There were six CCC camps within the park boundaries, and a total of almost 1000 enrollees. Some of the projects completed by the CCC in the park include the reconstruction of the Wonderland Trail; landscape restoration at Tipsoo Lake, Paradise and Sunrise; and construction of the White River and Ohanapecosh campgrounds.



CCC enrollees stationed at Ohanapecosh Campground arrived at Mount Rainier in 1934.

All of the enrollees were young men aged 18-25 and each received full room and board plus \$30 per month salary. The \$25 automatically sent home to the enrollee's relatives, stocked many empty pantries and helped stimulate local economies across America. The once skeptical supervisor of the CCC at Ohanapecosh was so impressed by the young men's work that he suggested: "I hope they make the CCC permanent, even if they have to discontinue the Army and Navy. It is a great character building institution."

More than seventy years after it was disbanded, we continue to enjoy the labors of "Roosevelt's Tree Army". The excellent campgrounds and trails and the restoration of fragile subalpine meadows and lake shores during this era might not have been possible without the work of the Civilian Conservation Corps.

Welcome!

Look about you on a busy summer day at Paradise or Sunrise and you will see people from all walks of life. The national parks serve an incredibly important role in our



Superintendent Randy King

democracy as shared public spaces—common ground held and protected in trust for people to enjoy today and tomorrow; common ground reflecting the nation's bounteous natural legacy and rich history.

The parks are also important economic engines that keep on giving. This spring, a peer-reviewed analysis of visitor spending in 2011 was prepared by Michigan State University for the National Park Service (NPS). The report shows \$13 billion of direct spending by 279 million park visitors in communities within sixty miles of a national park. The visitor spending had a \$30 billion impact on the entire United States economy and supported 252,000 jobs nationwide. With an operating budget of \$2.75 billion every \$1 provided to the NPS that year generated over \$10 of economic benefits.

Locally, just over a million recreational visitors to Mount Rainier spent \$33 million in communities surrounding the park. This spending supported about 450 jobs in the local area, and another 700+, mostly seasonal NPS and concession jobs in the park at peak summer staffing.

National park visitors help sustain local, state and national economies. Thanks for making the choice to come to Mount Rainier!

Randy King Superintendent

3 Visitor Information

Will there be travel delays or detours due to road construction? How far is it from Paradise to Sunrise? Are pets allowed in the park? Are there wheelchair-accessible trails?

4-5 Hiking or Climbing?

Do you need a backcountry camping or climbing permit? How do you get one? Do you have the 10 Essentials with you? Are you prepared to Leave No Trace of your visit in the backcountry?

8 Park Information

Where are the visitor centers? When are they open? Where can I get something to eat? Are the campgrounds open? It's all on the back page!

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Lost and Found

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Your entrance fees at work!

The *Tahoma News* is printed quarterly with Federal Lands Recreation Enhancement Act funding.

Websites

Mount Rainier National Park: www.nps.gov/mora North Coast and Cascades Science & Learning Network: http://nwparkscience.org/

Official Social Media Sites

Facebook: www.facebook.com/MountRainierNPS Flickr: www.flickr.com/groups/MountRainierNPS Twitter: www.twitter.com/MountRainierNPS YouTube: www.youtube.com/MountRainierNPS



EXPERIENCE YOUR AMERICA™

Where's Charlie?



Those of you familiar with the Longmire Museum's mascot, Charlie the Cougar, may wonder why he's not at his post this year. After 89 years Charlie has gone for some conservation treatment and should be back next year.

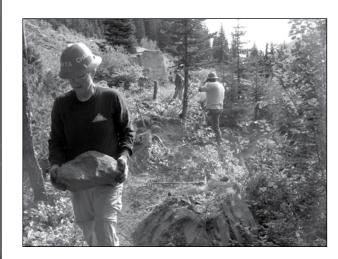
Accessibility

Most comfort stations, visitor centers, picnic areas, and designated campsites are accessible or accessible with help for wheelchair users. Accessible lodging is available inside the park and in local communities. In the Jackson Visitor Center at Paradise, the audiovisual programs are captioned; assistive listening devices are available for the park film; an audio described tour of the exhibits is available; and the building and exhibits are accessible to wheelchair users. At the Sunrise Visitor Center, the newly-renovated interior and exhibit area are accessible with help via the north entrance. The Kautz Creek Boardwalk Nature Trail is accessible. In Longmire, the east side of the unpaved Trail of the Shadows loop is accessible with help. Two accessible trails lead to the base of the Paradise meadows, and a portion of the trails at Paradise are accessible with help; inquire at the Jackson Visitor Center for more information. TDD: (360) 569-2177



New – Mount Rainier Adventures! Try Citizen Ranger Quests this Summer

There is a new way to explore the park! Have your own adventure by completing "Citizen Ranger Quest" activities. Has your inner Junior Ranger never really gone away? Try out a Quest! They are designed for older children (12 and up) and adults. However, these in-park learning adventures can also be enjoyed by younger children with help from adults or older children. Groups, families, or individuals completing four of the do-it-yourself activities become: "Mount Rainier Citizen Rangers," and receive a unique certificate. Quest topics are diverse and vary from history to stewardship. Some Quests take place indoors while others help you explore outdoors. Completion times for the different Quests vary from about thirty minutes to two hours. This summer, we are piloting at least four new Quests and asking for feedback about them from the public. Additional Citizen Ranger Quests are in development. We will be looking for your good ideas that can become new Quests! For additional information, or to obtain your Citizen Ranger Quest activity sheets and certificates, inquire at the Longmire, Paradise, or Sunrise visitor centers.



Become a Volunteer Mount Rainier Ranger

As you visit Mount Rainier, keep your eyes open for people wearing hats and shirts with a "volunteer" logo on them. You'll see them working in the visitor centers, assisting visitors on the trails, planting native vegetation, rebuilding flood-damaged trails, even helping to survey amphibian populations.

Last year, 1,804 people contributed a total of 74,615 hours of volunteer time, working in partnership with the National Park Service to protect the natural and cultural resources of Mount Rainier and serve its visitors. These invaluable partners help us accomplish far more than we would be able to without their help.

Have you ever dreamed of being a park ranger? You still can—for a day, a summer, or on weekends as your schedule permits. Opportunities abound, and great personal rewards await. Ask how you can become part of our team! Visit our website at www.nps.gov/mora/supportyourpark/volunteer.htm.

The Many Sides of Mount Rainier

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Longmire's historic wooden suspension bridge

the aftermath of the 1947 mudflow; or drive to the end of the Westside Road to see the dramatic results of flooding and rockfall. For great views of lava layers, glaciers, and deep glacial canyons, stop at the viewpoints along Ricksecker Point Road, between Longmire and Paradise.

South: Paradise

The Jackson Visitor Center and historic Paradise Inn are hubs of activity at the most popular (and crowded) destination in the park. A network of hiking trails provides access to outstanding wildflower meadows, broad views of Mount Rainier and its glaciers, and routes for skilled climbers attempting to reach the mountain's summit. Photographers appreciate the high-country scenery at Inspiration Point and Reflection Lakes. Hikers looking for less-crowded trails might try the Lakes Trail, Mazama Ridge, and Snow Lake Trail, located just east of Paradise.

Southeast: Ohanapecosh

Ohanapecosh, in the park's southeast corner, lies deep in the realm of the old-growth forest. From the campground, trails follow the Ohanapecosh River past hot springs and shaded streams to the roaring cascade of Silver Falls. Walk the trail to the Grove of the Patriarchs, just past the Stevens Canyon Entrance, to view ancient trees—some over 1,000 years old. Strong hikers will enjoy the incredible view from the Shriner Peak fire lookout, east of State Route 123, and the string of waterfalls along the East Side Trail. On the Stevens Canyon Road between Ohanapecosh and Paradise, dramatic viewpoints and a picnic area are found at Box Canyon, where the Cowlitz River cuts a deep slot into glacially-scoured bedrock.



Tipsoo Lake near Chinook Pass

Northeast: Sunrise and White River

The White River/Sunrise Road leads from State Route 410 toward the White River Campground and high-country trailheads. From here, trails lead hikers to subalpine wilderness or to the moraine of the Emmons Glacier, the largest American glacier outside of Alaska. Continuing up the road toward Sunrise, look for outcrops of columnar lava, hillsides of wildflowers, and a breathtaking vista at Sunrise Point. Washington's highest paved highway ends at the Sunrise Visitor Center (6,400 feet), where summertime crowds come to enjoy the area's open meadows and expansive scenery, considered by some to be the grandest views in the park. Along SR 410, a trail leads strong hikers up to the scenic Crystal Lakes basin, and the Tipsoo Lake area near Chinook Pass provides a picnic area next to the lake and its lush meadows.

Parking in Paradise



If you are visiting Paradise on a nice day be prepared for heavy traffic, busy parking lots, and pedestrians on the roadway. Due to the popularity of the Paradise area, visitors are asked to park their vehicles in certain lots depending on the intent of their visit and the type of vehicle they're driving. Please drive courteously and help improve traffic flow by following these guidelines:

 Parking in the upper Paradise lot, adjacent to the Jackson Visitor Center, is intended for short-term visitors and is limited to two hours. This lot is generally full by 11:00 a.m. Disabled visitors with a valid disabled parking permit may park in the upper lot with no time restriction; disabled-accessible trailheads are available near the visitor center and the Paradise Inn. Guests staying overnight at the Paradise Inn may also park in the upper lot during their stay.

Parking in the lower Paradise lot is intended for visitors staying longer than two hours, for those hiking in the Paradise area, and for backcountry campers and climbers with a valid backcountry permit. When the upper Paradise lot is full, short-term visitors may also use the lower lot.

Parking can be difficult to find on sunny summer weekends at Paradise, Sunrise, Grove of the Patriarchs, and at trailheads between Longmire and Paradise. To avoid congestion, visit these areas on weekdays, arrive early, and carpool.

- Additional parking for long-term and overnight visitors is available along the oneway Paradise Valley Road, east of the upper Paradise lot.
- Motorhomes, RVs, and vehicles towing trailers must park along the Paradise Valley Road, east of the upper Paradise lot.
- The Paradise Shuttle is not operating this season due to funding.

How Far Is It?	One Way Driving Times & Distances			
Road	Distance	Time		
Longmire to Paradise	12 miles	25 min		
Paradise to Ohanapecosh via Stevens Canyon Rd	23 miles	45 min		
Ohanapecosh to White River Entrance	18 miles	30 min		
White River Entrance to Sunrise	13 miles	45 min		
White River Entrance to Carbon River via Enumclaw	61 miles	2 hrs		
Longmire to Carbon River via Eatonville/Orting	80 miles	2.5 hrs		
Longmire to Mowich Lake via Eatonville/Orting	89 miles	3 hrs		

Don't Be A Victim!

Burglaries have recently occurred at numerous trailheads and parking areas in the park. Those responsible for the crimes were investigated and arrested by Mount Rainier rangers and National Park Service special agents and convicted in court. However, these convictions will not necessarily end the problem of car burglaries in the park.

Follow these simple guidelines to avoid becoming a victim of future car break-ins:

- Do not leave any valuables in your vehicle, even for a short time.
- Do not leave bags, packs, or purses which look like they could contain valuables visible in your vehicle.
- If you must store any personal items in the trunk of your car, do so before you arrive at your destination. You may be being watched at the trailheads and parking lots.
- Immediately report all suspicious activity you observe at or around parking lots or along roads to a park ranger.

Enjoy Your Visit, Protect Your Park

Mount Rainier National Park was established in 1899 to preserve the natural and cultural resources in this area and to provide for public benefit and enjoyment. Please enjoy the park safely and courteously, and help protect park resources by following these rules:

- Pets must be on leashes no longer than six feet and are not allowed in buildings, on trails, in off-trail or backcountry areas, or on snow.
- Do not feed, approach, or disturb the wildlife.
- Stay on designated trails.
- Make fires only in a fire grill. Collecting firewood is prohibited.
- Bicycle only on roads, not on trails.
- Camp in designated campsites only. Sleeping in vehicles outside of campgrounds is not permitted.
- The use of firearms is prohibited within Mount Rainier National Park. Also, federal law prohibits firearms in certain facilities in this park; those places are posted with signs at public entrances. People who can legally possess firearms under federal, Washington State, and local laws may possess them in the park.

Please Recycle!

Mount Rainier National Park has been recycling since the late 1960s. We recycle aluminum cans, plastic (no. 1 and 2), glass, office paper, mixed paper, cardboard, scrap metal, used oil, batteries, and a number of other items.

We also purchase recycled plastic products such as plastic bags, picnic tables, and plastic lumber; paper products made of pre- and post- consumer recycled paper; automobile products; and other products.

Be part of the effort! Please deposit aluminum cans, plastic bottles and glass in the recycle cans provided.

-Travel Advisories-

Stevens Canyon Road

This summer will be the final season of a three-year effort to rehabilitate two five-mile sections of Stevens Canyon Road, from its intersection with the Nisqually Road at the Canyon Wye to the Stevens Creek Bridge, and from its intersection with

SR 123 to just east of Backbone Ridge. Visitors can expect up to 20-minute delays at each construction zone until the end of the project, currently scheduled for September 17, with possible closures during the weekdays for two weeks beginning September 3rd.

In addition, road striping as well as ditch reconditioning is tentatively scheduled to take place in August in the middle nine-mile section of Stevens Canyon Road, from Stevens Creek Bridge to just east of Backbone Ridge under a separate contract. Visitors can expect very short delays.

State Route 123

Ditch reconditioning is also tentatively scheduled to take place in late August or early September on SR 123 generally between Panther Creek Bridge and north to the road tunnel. Visitors should anticipate very short delays

Park roads are winding, road shoulders are narrow, and the speed limit is 35 mph in most areas. Watch for pedestrians, sightseers, bicyclists, and wildlife. Please be courteous, and use pullouts to allow faster drivers to pass you safely.

Nisqually Road

Road striping on the 17.6 mile long Nisqually Road as well as pavement marking in the Paradise, Narada Falls, and Comet Falls parking areas is tentatively scheduled to take place in August or early September. Visitors can expect very short delays.

For future planning, rehabilitation work on the busy Nisqually Road is scheduled to begin in April/May 2014 with completion in September 2017. Phase 1 – Nisqually Entrance to Longmire – is tentatively scheduled to begin April/May 2014 and be completed by September 2015. Phase 2 – Longmire to Paradise – is tentatively scheduled for May 2016 to be completed by September 2017. Rehabilitation work will also include the Ricksecker Point Scenic Loop Road and the Paradise Valley Road.

Due to the nature of the work, narrowness of the roadway, and traffic volumes during peak season, the park will permit nighttime closures, generally from 10 p.m. to 5 a.m. Sundays through Thursdays, starting June 15th each year, in order to accomplish significant subsurface stabilization work. During daytime work activities, visitors can expect 20 to 30 minute delays.

To avoid congestion during construction, access Paradise from Stevens Canyon Road from the north via SR 410 / SR 123 or from the south via US 12 / SR 123.

Knowledge and Safety: Keys to Great Hiking

With 260 miles of park trails, there are plenty of opportunities to be adventurous, explore, learn, and have fun hiking. Waterfalls, meadows, deep forests, and rugged highcountry await those who properly prepare for their journeys. Here are some important tips for all hikers:

- Talk with rangers about trail conditions, distances and elevations.
- Carry a topographic map.
- Know the weather forecast, and stay alert for changing conditions
- Be prepared by carrying the ten essentials.
- Choose appropriate outdoor clothing, footwear and gear.
- Whenever possible do not hike alone.
- Always tell someone of your travel plans so they can notify the park if you fail to return.

Pay Attention To The Weather

At Mount Rainier, the weather can change rapidly. Hikers who aren't prepared increase their risk of becoming lost or injured. Avoid problems: know and plan for Mount Rainier's changeable weather.

Crossing Streams Safely

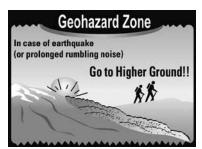
Many hikers underestimate the power of moving water and some consider their former successful stream crossings as a ticket to the other side. This may not be true. Regardless of your knowledge, skills, and experience use these pointers in making wise decisions when crossing a steam.

- Early morning when river levels are generally at their lowest is the best time to cross.
- Look for an area with a smooth bottom and slow moving water below knee height.
- Before crossing, scout downstream for log jams, waterfalls and other hazards that could trap you. Locate a point where you can exit if you fall in.
- Use a sturdy stick to maintain two points of contact with the ground at all times.
- Unfasten the belt of your pack so you can easily discard it if necessary.
- Staring down at moving water can make you dizzy. Look forward as much as possible.

Mount Rainier: An Active Volcano

Active steam vents, periodic earth tremors, and historic eruptions provide evidence that Mount Rainier is sleeping, not dead. Seismic monitoring stations around the mountain should provide days or weeks of advance warning of impending eruptions. Other geologic hazards, however, can occur with little warning. These include debris flows and rockfalls.

The more time you spend in an area with geologic hazards, the greater the chance that you could be involved in an emergency event. While most people consider the danger to be relatively low, you must decide if you will assume the risk of visiting these potentially dangerous locations.



If you are near a river and notice a rapid rise in water level, feel a prolonged shaking of the ground, and/or hear a roaring sound coming from upvalley—often described as the sound made by a fast-moving freight train—move quickly to higher ground! A location 200 feet or more above river level should be safe.

Detailed information is available at park visitor centers or from scientists at the U.S.G.S. Cascades Volcano Observatory vulcan.wr.usgs.gov.

Wilderness Camping

Wilderness camping permits are required for all overnight stays in the park's backcountry. Permits and backcountry information are available at all wilderness information centers and most visitor centers (see page eight for locations and hours).

Although permits are free, there is an optional, fee-based reservation system for campers and climbers in effect May through September. Backcountry reservations are \$20 per party (one–12 people) for one to 14 consecutive nights.

Seventy percent of all backcountry sites and zones are available for reservation. Permits for the remaining 30% are issued on a first-come, first-served basis, no more than one day in advance of the start of the trip.



Climbing

Each year, approximately 10,000 people attempt to climb Mount Rainier. Nearly half reach the 14,410-foot summit. Climbing permits are required for travel above 10,000 feet and/or on glaciers. Climbing information—including fees, routes, and conditions—is available at the Paradise Climbing Information Center and other ranger stations. Please obtain permits 30 minutes prior to ranger stations' closing times (see page eight). Guided climbs and climbing seminars are available through:

- Alpine Ascents International (206) 378-1927
- International Mountain Guides (360) 569-2609
- Rainier Mountaineering, Inc. (888) 892-5462



Hiking the Muir Snowfield

The Muir Snowfield, a permanent field of snow, ice and rock outcrops, is located north of Paradise between 7,000 and 10,000 feet in elevation. Thousands of people hike on the Muir Snowfield each year en route to Camp Muir. On a clear day, the hike is spectacular. But when the weather deteriorates, as it often and unpredictably does, crossing the Muir Snowfield can be disastrous.

- Avoid the snowfield in questionable weather, especially if you're alone or unprepared.
 Weather conditions can change suddenly and drastically.
- If you're ascending and clouds or fog start rolling in, turn around and head back to Paradise. If that's not possible, stop moving, dig in, and wait for better weather.
- Without a compass, map, and altimeter, it is extremely difficult to find your way to the trailhead in a whiteout. Carry these items and know how to use them.
- Do not descend on skis or a snowboard in limited visibility—you could become lost.
- When hiking to Camp Muir, be sure to carry emergency bivouac gear so that you can spend the night out if you have to.
- To protect fragile alpine vegetation, hike only on official trails or snow.

While it may be disappointing to abandon your hike to Camp Muir, remember that the snowfield will still be there in better weather.

Area	Trail Name	Trailhead Location	Round-Trip Distance	Comments		
Carbon River	Rainforest Nature Trail	Carbon River Entrance	0.3-mile loop trail	Self-guided trail through an inland temperate rainforest		
Kautz Creek	Kautz Creek Viewpoint	3 miles southwest of Longmire	0.1 mile	Wheelchair-accessible boardwalk and viewpoint		
Longmire	Twin Firs	1.9 miles southwest of Longmire	0.4-mile loop trail	Short hike in old-growth forest. Limited parking		
	Trail of the Shadows	National Park Inn trail strolls; meadow east half of loc		Good for children & evening strolls; meadow/mtn. views; east half of loop suitable for wheelchairs with assistance.		
	Carter Falls	2 miles northeast of Longmire	2 miles	Moderate hike, climbs 500' u forested canyon to waterfall		
Paradise	Nisqually Vista	Lower Paradise parking lot	1.2-mile loop	Wildflower meadows, great views of Nisqually Glacier		
	Skyline Trail to Myrtle Falls	Large stairway/ramp near visitor center	1 mile	Suitable for strollers and wheelchairs (with assistance)		
Stevens Canyon Rd.	Bench & Snow Lakes	1.5 miles east of Reflection Lakes	2.5 miles	Watch for bears in the meadows in late summer		
	Box Canyon	11 miles east of Paradise	0.5-mile loop	View a deep, narrow canyon and glacially-polished rocks		
Ohanapecosh	Grove of the Patriarchs	Near Stevens Canyon entrance	1.2-mile loop	Old-growth forest, ancient trees		
	Silver Falls	Ohanapecosh Campground	2.4-mile loop	Old-growth forest, waterfall		
Mather Memorial Parkway/SR 410	Tipsoo Lake	Off SR 410, east of Cayuse Pass	0.5-mile loop	Short trail around the lake, mountain views		
Sunrise	Silver Forest/ Emmons Vista	South side of parking lot	2 miles	Glacier views at Emmons Vista Overlooks (0.5 mile one-way)		
	Nature Trail	North side of parking lot	1.5 miles	Wildflower meadows and great mountain views		

Hazards of the Season

Winter snowpack lingers late into the summer on the mountain. As of June 1st of this year, nearly 15 feet of snow remained on the ground at Paradise, 10% over the average amount recorded at Paradise on this date in previous years. Heavy snowpack conditions significantly increase search and rescue incidents in the backcountry due to visitors unprepared for the route finding challenges encountered when travelling on snow. Footprints in the snow melt away quickly. Even when they remain, knowing which footprints are yours and whether the ones you are following will take you home or deeper into the wilds can be confusing. This situation has resulted in many lost individuals and has contributed to injuries and fatalities; however, early season hiking in the mountains can be an amazing experience when properly prepared.



A beautiful day on the mountain can turn into dangerous whiteout conditions in a matter of minutes. Knowing what to do and making the right decision can be the difference between life and death.

Mountain weather changes rapidly - a pleasant outing can quickly be transformed into a survival ordeal. Navigation in white-out or harsh winter conditions can be extremely difficult. It is generally better to stay put and wait for clearing weather than to continue and risk becoming lost.

Snow avalanches are common in spring. When travelling in avalanche terrain, carry a transceiver, probe and shovel and know how to use them. Would you know if you were travelling in avalanche terrain? When in doubt, ask questions or don't go.

Also consider other hazards of travel on snow: falling on icy steep slopes, falling into melt holes or through thinning snow bridges. Do you have the proper skills and experience for your outing? Do you have the proper gear? Adequate boots? Ice axe? The ten essentials?

Trails may be snow-free at lower elevations but anticipate and prepare for snow at higher elevations. Carry a good map and compass and actively use them when trails are obscured by snow. Consider supplementing this with an external antenna GPS for best coverage. Avoid travelling alone. As you travel, note important landmarks that may help you return later.

When you set out on a trail, be self-sufficient. Beyond the trailhead, hazards are unmarked. You are responsible for your own safety. As you head out for a walk, a ski or ride, plan for your own selfrescue. What will you do if you twist your ankle, become stranded or lost? Does anyone know where you are headed? Cell phones don't work in most locations in the park.

The park is proud of our long history and ability to respond to search and rescue incidents. Due to several fatalities and injuries of park employees during search and rescue incidents in the recent past, the park has implemented policies intended to reduce the risk to our rescuers. These changes may lead to more measured rescue response and greater response times.

If You See a Black Bear or a Mountain Lion



Mount Rainier National Park provides habitat for many animal species. Among the largest and most feared are the black bear and the mountain lion. Though you are not likely to see them, if you do meet one of these larger mammals, your best defenses are awareness and knowledge.

The best way to avoid unwanted encounters is to be alert, and don't attract or surprise them. Wildlife tend to have a "personal space", and if you enter that space they may become aggressive. Watch them from a distance. Watch for evidence of their presence such as scat and tracks. Bears commonly rip up logs for insects, and usually leave lots of scat around. Mountain lions cover their scat by raking dirt with their rear feet. Keep all food and attractants, including trash, securely stored and inaccessible to wildlife. Food conditioning, where animals associate people with food, is one of the leading causes of human injuries from bears.

Close Encounters With Black Bears

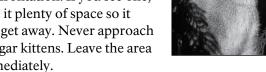
Although black bear attacks are extremely rare in the United States and have never occurred in this park, your safety depends mostly on your own actions. If you encounter a black bear, do not run, but back away slowly and leave the area. A defensive bear will appear agitated and will often give visual and vocal warnings like swatting or stomping the ground, exhaling loudly, huffing, snapping teeth, or lowering the head with ears drawn back while facing you. This response may escalate to a charge. Bears respond to people in different ways—take time to understand the signals. Be aware of aggressive signals and know how to respond to prevent close encounters.

If Charged by a Black Bear

- Stand your ground and do not run.
- If the bear stops, slowly back away while talking, keeping the bear in view while leaving the area.
- If it continues, act aggressively, shouting and throwing rocks or sticks.
- If the bear attacks and you have food, distance yourself from the food.
- If the bear attacks and you do not have food, fight back aggressively. This is likely a predatory attack, and the bear is treating you as prey.

Close Encounters With Mountain Lions

Mountain lions (also known as cougars) usually do not like confrontation. If you see one, give it plenty of space so it can get away. Never approach cougar kittens. Leave the area immediately.



- Do not run or turn your back on a lion.
- Gather children with adults. Quickly pick up and hold small children.
- Stand in a group with your companions.
- If the lion moves toward you, wave your arms and make noise. Make yourself look large, intimidating and in control: stand up tall, open your jacket, yell, throw things.
- Back away slowly while facing the animal.
- If attacked, fight back aggressively. Stay standing. Hit as hard as possible especially to the head. Use a stick or rock as a weapon. Throw dirt in the eyes. Protect your head and

Report all bear and mountain lion sightings to a ranger.

Before you step off the trail...

... consider this: each step into a meadow crushes an average of 20 plants!



When exploring Mount Rainier's fragile meadows...

Please hike only on maintained trails or thick patches of snow.

Leave No Trace

Plan ahead & prepare Travel & camp on durable surfaces Dispose of waste properly Leave what you find Minimize campfire impacts* Respect wildlife Be considerate of others

*Fires are for emergency use only; they are not allowed in Mount Rainier's Wilderness

Keep Wildlife Wild

- Please don't feed the wildlife.
- Store your food in an animal-proof container, or inside your car.
- Don't leave food, beverages, pet food, or toiletries unattended for any length of
- Clean up picnic areas after you eat.



Human food puts animals at risk and some die as a result. Birds like jays or ravens are effective nest predators – eating the eggs or young of other birds. By feeding birds, visitors concentrate

these nest predators near roads and trails and inadvertently contribute to the death of songbirds in the same area.

Still, one of the most common mistakes people make at Mount Rainier National Park is to feed the wildlife. Visitors seeking a personal connection with animals think they are "helping" them. In fact it harms them in many ways.

Beggar squirrels, foxes, deer, and jays learn to approach people and busy areas and often get hit and killed by cars. Animals that become accustomed to humans and human food may pursue and injure visitors. Biologists and rangers must intervene – with killing the animal as the last resort.

Carry the "10 Essentials" and know how to use them!

- 1. map of the area
- 2. compass
- 3. extra food & water
- 4. extra clothing (warm!) & rain gear
- 5. emergency shelter
- 6. first aid kit
- 7. flashlight or headlamp
- 8. sun glasses & sun screen
- 9. pocket knife
- 10. matches (waterproof!)



Mount Rainier National Park belongs to a network of "Climate Friendly Parks" who are leading the way in the effort to protect our parks' natural and cultural resources and infrastructure by addressing the current and future impacts of climate change. Mount Rainier conducted an inventory of greenhouse gases (GHG) produced in park operations; this was the first step in developing a Climate Friendly Park Action Plan with the goal of reducing GHG emissions from park operations by 30% by 2016. Specifically, we are addressing energy use, transportation and waste disposal. Actions planning for adapting to the inevitable climate changes are also included.

The plan not only includes strategies to reduce emissions, but also one to educate park staff, visitors and local communities. By seriously addressing climate change impacts and reducing GHG, Mount Rainier National Park will reduce its contribution to the problem while setting an example for visitors and serving as a model for climate friendly behavior within the National Park Service.

Greenhouse gases from human activities result from deforestation, the combustion of fossil fuels for energy and transportation uses, and the decomposition of waste and other organic matter. The release of gases from various sources such as the management of manure from livestock, the use of fertilizers, and chlorofluorcarbons in refrigeration and fire suppression systems also contribute to GHG.

What To Do About Energy

goal in the effort to reduce GHG emissions.

The Biggest Contributor

Cars, RVs, buses and park equipment contributed 72% of the GHG emissions in 2006. Visitors traveling within the park boundaries via motorized vehicles generated nearly 50% of these emissions.

Solutions for reducing transportation-related GHG emissions include increasing traffic flow at entrance stations to help decrease the time that vehicles idle; reducing vehicle miles that park employees travel; improving vehicle efficiency; and expanding the use of alternative fuels to operate park vehicles.

You can participate in the Climate Friendly Parks effort! Calculate your carbon footprint, set your personal goals, and find other interesting facts and important information at www.nps.gov/ climatefriendlyparks.

Nearly 25% of the GHG in the park is created by purchased electricity or stationary combustion. Park operation is the primary source of these GHGs. Keys to improving energy efficiency are educating park staff to change behavior on energy use and implementing conservation measures. Standards for computer use and heating offices will be created. Inefficient appliances will be identified and replaced. The production and/or purchasing of energy from clean, alternative sources is another

Your gifts help fund trail maintenance by volunteer and youth groups like Washington Trails Association, Washington Conservation Corps, Student Conservation Association, scout troops, and others.

Help Us Enhance

Executive Director

on these four main areas:

campgrounds

park

(animals)

at \$1.8 million!)

Mount Rainier's Trails

By Laurie B. Ward, Washington's National Park Fund

Do you enjoy hiking the trails of Mount Rainier? Would you be interested in helping out but find yourself limited by time? Consider adopting-a-trail mile through Washington's National Park Fund.

Founded by Governor Daniel Evans in 1993, the

Fund, a 501(c)(3) nonprofit organization, serves as the park's official philanthropic partner. The Fund accepts charitable gifts that are then given back to

Mount Rainier National Park for projects focusing

Improving Visitors' Experiences by

maintaining trails, supporting the park's

Search and Rescue program, and improving

Bringing more Youth and Families – many of

whom might otherwise never visit – into the

Funding necessary Science and Research

on glaciers, rivers, flora (flowers) and fauna

\$50,000 each year so the park can support

Strengthening Mount Rainier's Volunteerism

and Stewardship activities (the Fund provides

nearly 2,000 volunteers whose efforts are valued

Whether you adopt a trail mile, include Mount Rainier in your will, a drop a few coins in the donation boxes at Mount Rainier's visitor centers, they all add up and have a major impact on this beloved place. Please consider giving back to Mount Rainier National Park through Washington's National Park Fund. Turn your passion for Mount Rainier into action that will benefit visitors today and tomorrow.

For more information please go to the Fund's website: www.wnpf.org or email Washington's National Park Fund at fund@wnpf.org. Tax ID#: 01-0869799

Connecting Parks, Science and People

By Dr. Jerry Freilich, North Coast & Cascades Science Learning Network Coordinator

Quietly and discreetly, a great deal of science is done each year in our national parks. The National Park Service monitors ecosystem health and investigates sensitive plants and animals to improve management. Scientists from outside agencies and universities do their own research, using the parks as "controls" to compare with more heavily impacted areas.

The North Coast & Cascades Science Learning Network (SLN) is an organization within the northwest national parks created to encourage research in the parks and to disseminate scientific information. The "Network" serves all eight National Park Service sites in the Pacific Northwest and operates a science information website (http:// www.nwparkscience.org). The SLN website supplements the Park Service's own sites at each

park and features in-depth science information about park resources. The site has 2-3 page "Resource Briefs" on a diversity of topics and a series of "Science Minute Videos" (http://www. nwparkscience.org/video). Each video is about four minutes long highlighting both the science work itself and park scientists who do it. Have a look at these wonderful short films and send us your comments.

The SLN serves Mount Rainier, Olympic, North Cascades, and five smaller, historical sites in Washington and Oregon. The SLN also provides funding and support for graduate research and special projects. Please contact the SLN's director, Dr. Jerry Freilich (jerry_freilich@nps.gov), based at Olympic, for additional information.

Love Your Parks? Love Your Plates!

Support Mount Rainier, North Cascades and Olympic national parks by purchasing your national parks license plate today!



The plates are available for your car, truck, trailer, or motorcycle.

The parks receive \$28 from each plate of renewal. Last year plates generated \$130,000 for these treasured places!

More information is available on Washington's National Park Fund's website at www.wnpf.org.

Park Partners

Who's responsible for protecting Mount Rainier National Park? Everyone! Here are some groups that deserve special thanks.



Discover Your Northwest www.discovernw.org



National Park Volunteers www.nps.gov/mora/ supportyourpark/ volunteer.htm



Student Conservation Association www.thesca.org



Washington's National Park Fund www.wnpf.org



Mount Rainier National Park Associates www.mrnpa.org



Washington **Trails** Association www.wta.org

Ranger-guided Programs



Since the earliest days of the National Park Service, rangers have shared their knowledge through the presentation of interpretive programs—guided

walks, talks, and campfire programs for visitors of all ages. That long-standing tradition continues at Mount Rainier.

Today, our interpretive staff consists of rangers, teachers, student interns, and volunteers from a wide array of backgrounds and expertise. Please join us for a variety of free programs, ranging from informal talks at park visitor centers to junior ranger programs for kids to guided hikes, evening campfire programs, and even winter snowshoe walks. Find out who else has come to Mount Rainier and why. Discover what this mountain really is and what it may become. Meet some other users of the park's resources—from owls to elk—and learn why they are here. Topics vary daily, and may include geology, wildlife, ecology, mountaineering, or park history.

Most programs are available from late-June until Labor Day weekend. Program schedules and locations are posted at visitor centers and other locations throughout the park, as well as on page 7 of this newspaper. Details and short descriptions of some evening programs are also available in the calender of events on the park's website at www. nps.gov/mora/planyourvisit/events.

HEY KIDS!

Ask for a Junior Ranger Activity Book. It's FREE at all park visitor centers. Complete it to learn lots of cool stuff about your park, and earn a badge and certificate. And be sure to join the fun at one of our summertime junior ranger programs. See below for details.



Interpretive Activities—July 1 to September 2

You're Invited!

Join a park ranger for an evening program, guided nature walk or talk. Explore the nature and history of Mount Rainier National Park. A variety of programs are offered throughout the park each day.

Longmire/Cougar Rock Areas

Junior Ranger Program 6:30 p.m. daily through July 28; 6:30 p.m. Fridays and Saturdays only August 3 through August 24
Ages 6 to 11. Join a ranger or volunteer for fun and educational activities! Meet at the Cougar Rock Campground Amphitheater. Parking at the Cougar Rock Campground is limited. If you attend the program but are not camping, please park in the Cougar Rock Picnic Area across the park road from the campground. (30–45 minutes)

Evening Program 9:00 p.m. daily through July 28; 8:30 p.m. Fridays and Saturdays only August 4 through August 24

Join a ranger or volunteer for a program that involves, inspires and explores! Topics vary nightly. Meet at the Cougar Rock Campground Amphitheater. Parking at the Cougar Rock Campground is limited. If you attend the program but are not camping, please park in the Cougar Rock Picnic Area across the park road from the campground. (30–45 minutes)

Sunrise/White River Area

 ${\it Junior\,Ranger\,Program\,\,10:00\,\,a.m.\,\,Fridays,\,Saturdays,\,and\,\,Sundays\,\,only\,\,July\,\,5\,\,through\,\,September\,\,1}$

Children ages 6 to 11 are invited to join park staff for a fun activity about the mountain, glaciers, habitats and more. Meet at the White River Campfire Circle. (1 hour)

Sunrise Afternoon Guided Walks 1:00 p.m. and 3:00 p.m. daily through September 2

Learn about the natural and cultural history of the Sunrise area on this easy ramble with a ranger. Meet at the Sunrise Visitor Center flagpole. Trail is not wheelchair accessible. (45 minutes)

Evening Program 8:00 p.m. Thursday - Saturday July 4 - July 27, 7:30 p.m. August 1 - 31

Take an in-depth look at a special topic of Mount Rainier National Park during a traditional campfire talk. Meet at the campfire circle in the White River Campground. (45-60 minutes)

Paradise Area

Paradise Chat 9:15 a.m. daily (except Tuesdays) through September 2

The Paradise area has drawn visitors for over 100 years. Stop by the Paradise Inn and learn why. Look for the ranger inside the lobby of the Inn. (25 minutes)

Subalpine Saunter 12:15 p.m. daily through September 2

Discover the ecology of the Paradise area. Meet the ranger at the flagpole in front of the visitor center. Seventy-five minutes with the ranger plus time to return on your own. (1 mile round trip)

Nisqually Vista Walk 2:00 p.m. daily through September 2

Walk to a view of a glacier and explore the geology of Mount Rainier. Meet at the large flagpole outside the visitor center. Seventy-five minutes with the ranger plus time to return on your own. (1.5 miles round trip)

Ranger's Choice 4:00 p.m. daily through August 11

It's ranger's choice! Join a ranger for a walk, a talk, or just a chat. Topics vary daily. Check at the Jackson Visitor Center information desk for the topic of the day. Meet the ranger at the flagpole in front of the visitor center. (15–30 minutes)

Paradise Inn Lobby Tour 3:00 p.m. daily (except Tuesdays) through September 2

Join a ranger to learn the "inns and outs" of the historic Paradise Inn. Look for the ranger inside the Paradise Inn. (30 minutes)

Mount Rainier: The Restless Giant shows every 30 minutes, except during special presentations

This park film explores the changing nature of Mount Rainier, the wonders of its seasons, and stories of its people—past and present—through dramatic footage and narration. Presented in high-definition video and surround sound at the Jackson Visitor Center theater. Disabled-accessible, closed-captioned, and audio-described. (21 minutes)

Solar Viewing 3:30 p.m. until at least 5:30 p.m. Friday, Saturday, Sunday, and Monday through September 12

Night Sky Viewing Just after dark until approximately midnight Thursday, Friday, Saturday, and Sunday through September 12

Look Up! Many visitors often forget that the sky is a part of their wilderness experience. Mount Rainier is a great place to learn about and enjoy the splendor of both the day and the night sky. Participate in sky viewing with our volunteer astronomer. Telescopes provided! Meet in front of the Paradise Visitor Center. Weather dependent and subject to cancellation.

Special Programs: Check at bulletin boards, visitor centers or Inns for a schedule of special programs. These may include evening programs at the Paradise Inn and other opportunities

Visitor Facility Hours

Visitor Centers						
Longmire Museum (360) 569-6575	July 1 - August 5 9:00 a.m 5:00 p.m. daily August 9 - 25 9:00 a.m 5:00 p.m. Thurs Sun. only Closed as of August 26	Ranger programs, exhibits, information, book sales				
Paradise Henry M. Jackson Visitor Center (360) 569-6571	July 1 - September 2 10:00 a.m 7:00 p.m. daily September 2 - September 8 10:00 a.m 6:00 p.m. daily	Ranger programs, exhibits, information, park videos, book sales, food service, gifts				
Ohanapecosh Visitor Center (360) 569-6581	CLOSED for 2013 due to budget cuts See below for Ohanapecosh Campground information	Restrooms remain open				
Sunrise Visitor Center (360) 663-2425	July 3–September 2 10:00 a.m 6:00 p.m. daily	Ranger programs, exhibits, information, book sales				

Wilderness & Climbing Information Centers

Longmire WIC (360) 569-6650	July 1 - October 14 7:30 a.m 5:00 p.m. daily	Wilderness camping & climbing permits			
Paradise Climbing information Center (Guide House) (360) 569-6641	July 1 - September 2 6:00 a.m 3:00 p.m. Sun Thurs. 6:00 a.m 5:00 p.m. Fri Sat.	Climbing permits, exhibits, wilderness camping permits, information			
White River WIC (360) 569-6670	July 1 - September 2 7:30 a.m 5:00 p.m. Sun Thurs. 7:00 a.m 7:00 p.m. Fri. 7:00 a.m 5:00 p.m. Sat.	Wilderness camping & eastside climbing permits			
*The New! Carbon River Ranger Station (360) 829-9639	July 1 - September 2 8:30 a.m 5:00 p.m. Mon–Thurs 7:30 a.m 7:00 p.m. Fri–Sun Open year-round *Located on the Carbon River Road 5.5 miles east of the Mowich Lake (SR165) junction.	Wilderness camping & northside climbing permits (including lpsut Creek Campground)			

Food & Lodging

For in-park lodging reservations, call Mount Rainier Guest Services at (360) 569-2275 or go to **www.mtrainierguestservices.com**

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National Park Inn at Longmire Open year-round	Front Desk: 7:00 a.m 10:00 p.m. daily Dining Room hours: 7:00 a.m 8:30 p.m.	Lodging, dining room				
Longmire General Store Open year-round	9:00 a.m 8:00 p.m. daily	Gifts, snacks, firewood, apparel				
Paradise Inn Open May 18 - Oct. 1, 2012	Front Desk: open 24 hours daily Dining Room hours: Breakfast 7:00 a.m 9:30 a.m. Lunch 12:00 p.m 2:00 p.m. Dinner 5:30 p.m 8:00 p.m. Sun. Brunch 11:30 a.m 2:00 p.m. Cafe hours: 9:00 a.m 10:00 p.m	Lodging, dining, post office, gifts, books, apparel; ranger on duty and interpretive programs Wed Mon. through September 2				
Paradise Camp Deli and Gift Shop, in the Jackson Visitor Center at Paradise	10:00 a.m 7:00 p.m. daily	Food, gifts, books, apparel				
Sunrise Day Lodge Snack Bar and Gift Shop	10:00 a.m 6:45 p.m. daily Open through September 3	Food and gifts. Day use only, no overnight lodging				
Firewood Sales	Available through September 1 at Longmire General Store and Cougar Rock, Ohanapecosh, and White River campgrounds					

Gasoline, lodging, dining, recreation equipment rentals, and other services are available in local communities. A list of these services is available at park visitor centers and on the park's website at www.nps.gov/mora. Religious services are available in local communities.

GAS IS NOT AVAILABLE IN THE PARK

Firewood: Buy It Where You Burn It!

Washington forests are in jeopardy from the transportation of invasive insects and diseases in firewood. New infestations of tree-killing insects and diseases often are first found in campgrounds and parks. Here's what you can do to help:



- Buy firewood near where you will burn it—that means the wood was likely cut within 50 miles of where you'll have your fire.
- Wood that looks clean and healthy can still have tiny insect eggs, or microscopic fungi spores, that will start a new and deadly infestation. Always leave it at home, even if you think the firewood looks fine.
- Aged or seasoned wood is still not safe. Just because it is dry doesn't mean that bugs can't crawl onto it!
- Tell your friends not to bring wood with them.
 Everyone needs to know that they should not move firewood.

More information is available online at www. dontmovefirewood.org.

Camping is permitted only in established campgrounds:
Cougar Rock, Ohanapecosh,
White River, and Mowich Lake.
Backcountry camping requires a backcountry permit, available at wilderness information centers and ranger stations.

Hazard Trees

Ever wondered why some trees in the campgrounds have little silver tags nailed to them at ground level? Those are hazard tree identification tags. They signify that the trees they are attached to have been found to have one or more defects that are weakening their structural integrity. This doesn't mean that a tagged tree presents an immediate danger, but it is being monitored and is subject to treatment–either topping or complete removal—when its condition deteriorates enough to warrant such measures.

Trees in all developed areas of the park are subject to stress factors—particularly soil compaction and physical injury—that over time lead to diseases and other defects that cause them to become hazard trees. Visitors can protect trees by not damaging tree bark in anyway.

Drive-in Campgrounds									
Campground	Open Dates	Elev.	Sites	Fee	Group Sites	Group Fees	Toilets	Dump Station	Maximum RV/Trailer Length
Cougar Rock*	June 27 - Sept. 29	3,180′	173	\$12/15*	5	\$40-64	Flush	Yes	RV 35'/Trailer 27'
Ohanapecosh*	May 24 - Sept. 29	1,914′	188	\$12/15*	2	\$40	Flush	Yes	RV 32'/Trailer 27'
White River	June 28 - Sept. 29	4,232'	112	\$12	0	N/A	Flush	No	RV 27'/Trailer 18'
Mowich Lake	Primitive walk-in campground, tents only. 10 sites, 3 group sites (max. group size 12). No fee (must self-register at campground kiosk). Chemical toilets, <i>no potable water</i> . No fires allowed. Elevation 4,929'; generally open July through early October, depending on road and weather conditions. Call 360-829-9639 for information.								

*Advance reservations are recommended for individual sites at Cougar Rock and Ohanapecosh Campgrounds from June 27 through the night of September 2. These can be made up to six months in advance. Reservations for group sites are recommended and are available throughout the season. These can be made up to one year in advance. To make a reservation online go to www.recreation.gov or call 877-444-6777.